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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/549,847 | 09/19/2005 | Toshiki Mori | 277077US0PCT | 7102 |
| 22850 7590 10/09/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER | |
| | | | METZMAIER, DANIEL S | |
| ALEAANDRIA, VA 22514 | | | ART UNIT | PAPER NUMBER |
| | | | 1796 | |
| | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 10/09/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

| | Application No. | Applicant(s) | | | | |
|---|---|--|--|--|--|--|
| Office Action Comments | 10/549,847 | MORI ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Daniel S. Metzmaier | 1796 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period value of the reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 12/16 | 6/2005 & 8/7/2006 | | | | | |
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| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-14</u> is/are pending in the application. | 4) Claim(s) 1-14 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-14</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date <u>12/16/2005 & 8/7/2006</u> . 6) Other: | | | | | | |
| | | | | | | |

DETAILED ACTION

Claims 1-14 are pending.

Priority

1. Receipt is acknowledged of papers received in this national stage application from the International Bureau (PCT Rule 17.2(a)), submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are indefinite because it is unclear how applicants are defining the heated conduit. Therefore, the residence time in the heated conduit is unclear. Please contrast claims 5, 8 and 9, which refer to multiple conduits or sections. The dependent claims are included since they incorporate all the limitations of the claims, which they depend.

Claims 3 and 11-12 are indefinite because the phrase "the use quantity" and "the use amount" are indefinite. It is unclear that the claim positively requires said quantity and amounts of the materials in the process.

Claim 5 is indefinite since "the course" and "the outlet of the heated conduit to immediately before the mixing" lack proper antecedent basis. It is unclear what are the

Application/Control Number: 10/549,847 Page 3

Art Unit: 1796

metes and bounds of "the course". It is unclear how "the course of the solution" or "the outlet of the conduit" before "mixing with water is formed with the conduit".

Claim 9 is indefinite since "the length of the conduit from the outlet of the heated conduit to immediately before the mixing with the water" lacks proper antecedent basis.

Claim 13 is indefinite since it is unclear that the "at least one" lacks proper antecedent basis or is a further the water further comprises at least one of the claimed materials. It is unclear whether applicants intend the emulsifier or a further ingredient.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 14 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mori et al, US PGPUB 2002/0099102 A1. See paragraph [0064], which discloses forming the carotenoid powder substantially as claimed.

To the extent the method of making the powder from an emulsion and wherein said emulsion was made by a different emulsification method, the powder is examined based on the product rather than the method said emulsification methods. The powders of the Mori et al reference would have been expected to have been inherently the same as those claimed.

To the extent the powdered <u>differ</u> due to the process of emulsification, some variation in the powders would have been expected and applicants have not shown a nexus between the products and the emulsion making methods.

8. Claim 14 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stein et al, US 6,406,735. See abstract, examples and claims which disclose forming the carotenoid powder.

To the extent the method of making the powder by a different method, the powder is examined based on the product rather than the method said emulsification

methods. The powders of the Stein et al reference would have been expected to have been inherently the same as those claimed.

To the extent the powdered <u>differ</u> due to the process of making said powders, some variation in the powders would have been expected and applicants have not shown a nexus between the products and the emulsion making methods.

Allowable Subject Matter

- 9. Claims 1-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
- 10. The following is a statement of reasons for the indication of allowable subject matter: the combination of the toluene solvent and the process parameters therefore are not disclosed or fairly suggested in the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/549,847 Page 6

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel S. Metzmaier/ Primary Examiner, Art Unit 1796

DSM